

FTWeekend

HIDDEN CITIES

November 10/11 2018





**“OK Google...
talk to Hidden Cities”**



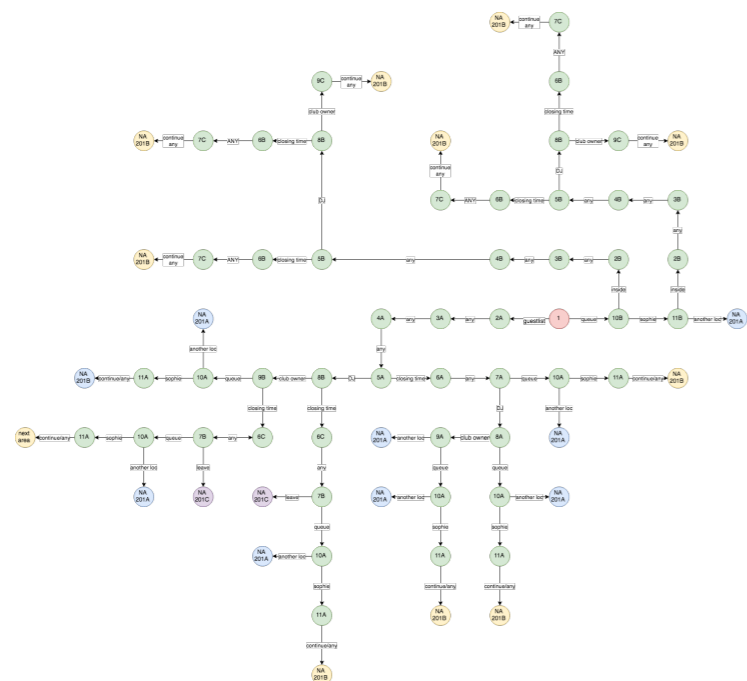
**A Financial Times Action for the
Google Assistant.**

**Co-produced by Rosina Sound and
Reduced Listening**

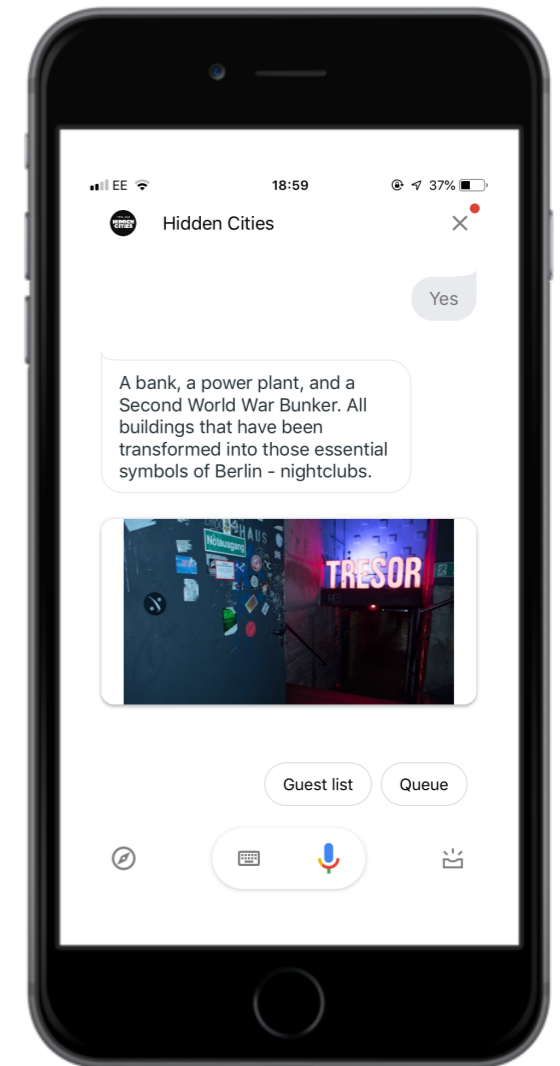
Hidden Cities Berlin

A ninety minute interactive audio adventure for the Google Assistant that transports you to the heart of the fast changing city of Berlin.

Use voice commands to choose your own path through nine exciting locations and local characters, with your host, The Financial Times Berlin Bureau Chief Guy Chazan.



*Hey Google...take
me to the clubs*



Hidden Cities

Design and Build Process

- The Key Questions
- Design Constraints
- UX Manifesto
- UX Flow
- Prototyping
- State tracking
- Real Voices
- Error Handling
- Onboarding
- Editorial Process
- Technical Production
- Bespoke CMS



Hidden Cities UX Design

The Key Questions

WHY? Why would you interact rather than listen passively?

HOW? How do we set up the experience so it's intuitive? How do you feel when you're in this experience? How can we make interactions fun and interesting?

WHAT? What is Hidden Cities? What can we offer that is different and compelling?

WHO? Who is the audience? What are they interested in? How can we tailor the experience for multiple users? How do we bring them back for more?



Hidden Cities UX Design Constraints

We started our UX design with our constraints

- Maximum 120 second clip length before an interaction
- The user could not absorb more than two, at the most three, options at any time
- No reverse navigation



Hidden Cities UX Design

The Rules

Story is king

Questions need to be concise, interesting, engaging and fun

Interactions need to have purpose and reward users as often as possible

Sound design is key to placing the user in Berlin, but also for setting up expectations of when to speak and when to listen

Design for inattention as it's likely the Action will be used when the user is not fully paying attention, or may be interrupted

Define the many voices and their roles
make sure the different voices of the host, narrative, and instructional is clear and easy to understand

Set up expectations for the experience:
how long it is, and what the user needs to do



Hidden Cities UX Design

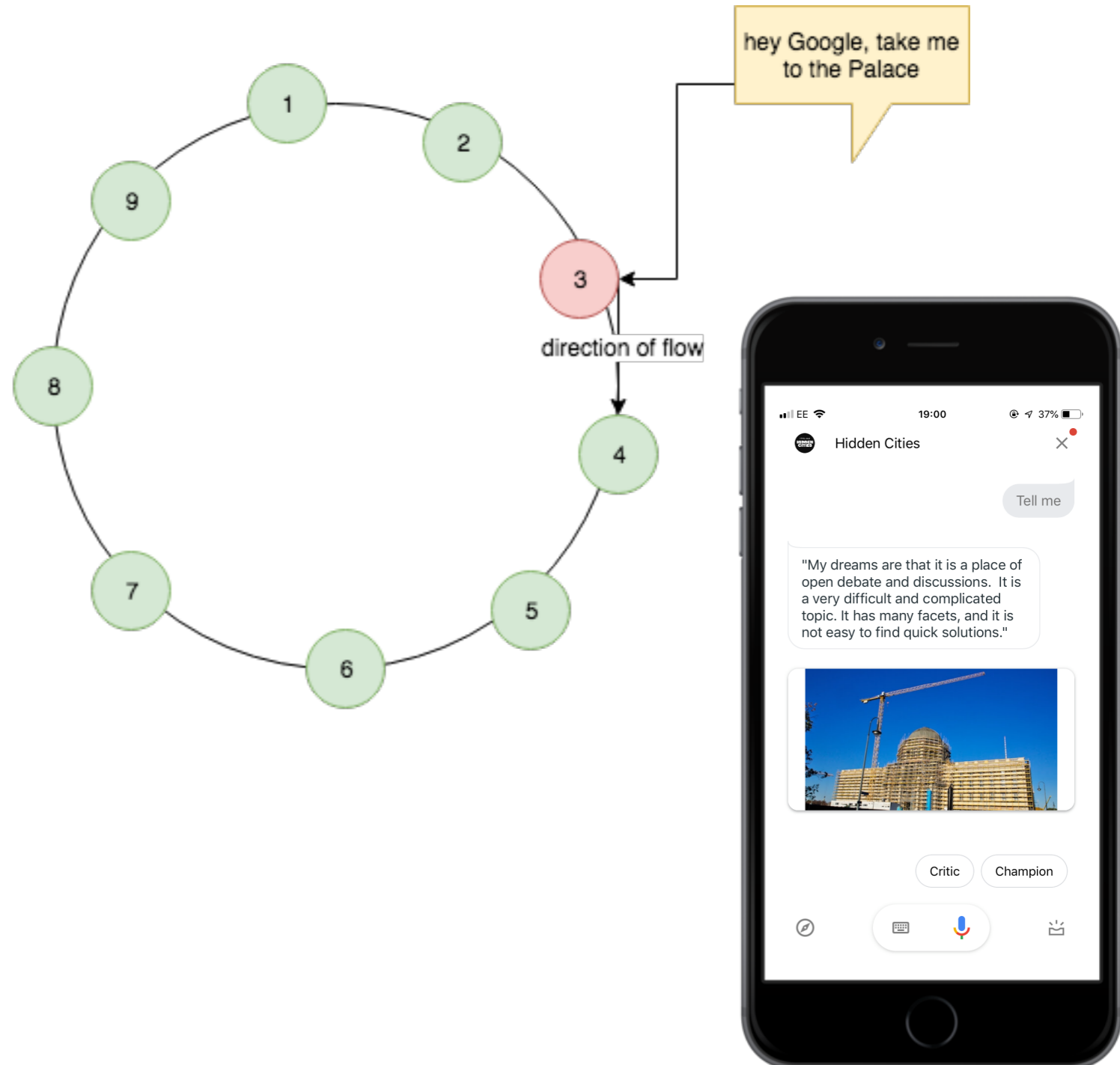
The Final Flow

From this we ended up with our final overall design, which included:

A simple circular flow

The user could enter from any point in the map, but they would be taken in a circle around the nine locations.

The ability to jump between locations



Alpha Prototype in DialogFlow

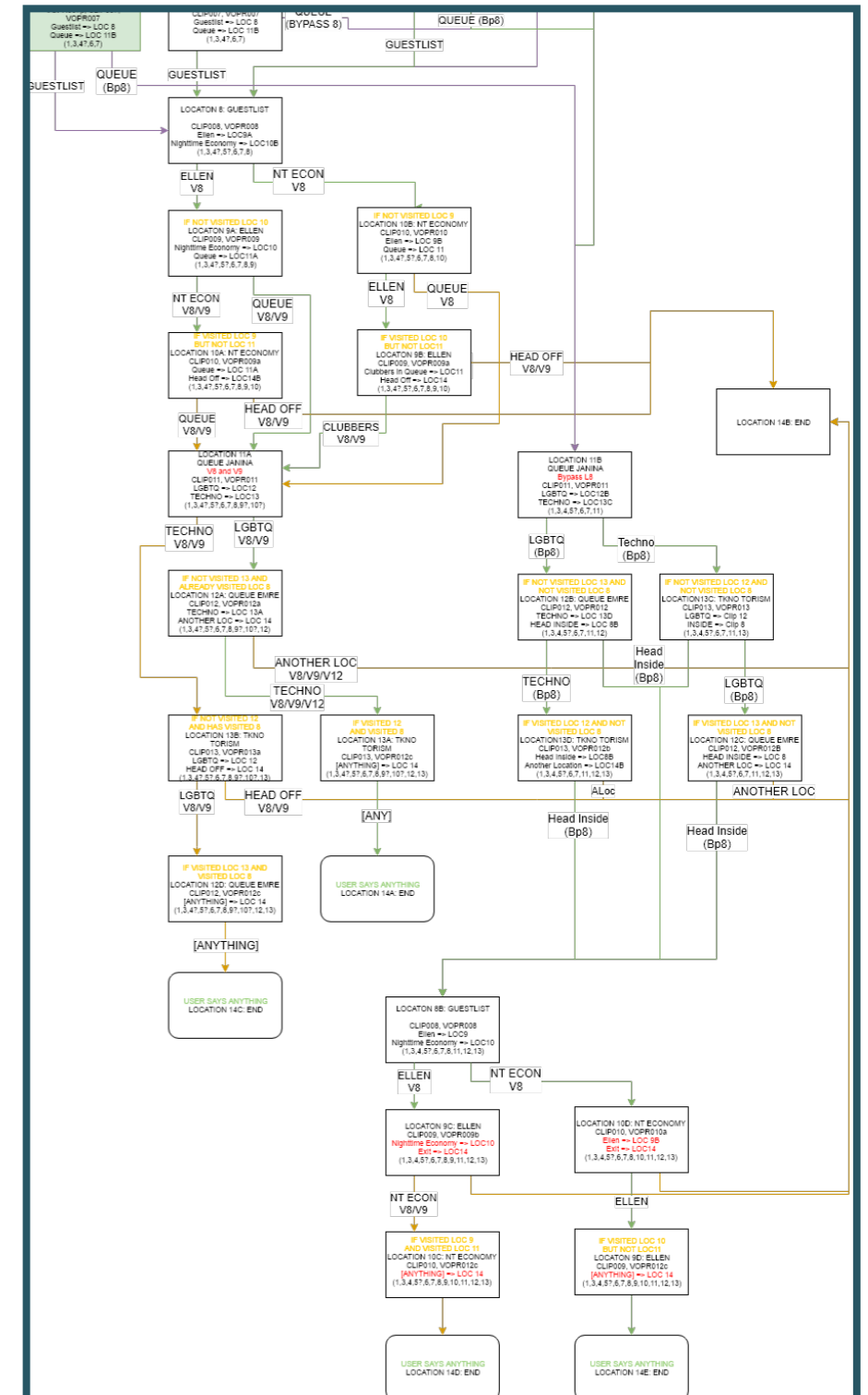
The technical production was in three phases - an **Alpha/prototype** phase, **Beta** and **Final** phase.

We flowcharted the script for a single location and recorded placeholder audio files.

Then manually produced a dialogflow action for 1/9 of the full scale.

This showed us using DialogFlow was complex and needed to be adapted quickly and we realised we needed to build a bespoke CMS.

We used the Alpha for initial concept user testing and outlining our delivery processes.



Hidden Cities UX Design State Tracking

If a user returned to the experience they were taken to the next unvisited location in the flow. This tracking could also tell if a user had been to locations out of order and skip over previous visited locations.

The Action also told them how much of the experience they had completed when they exited and when they returned.



Hidden Cities UX Design Interactions

Two types of interaction questions

We had simple binary questions leading on from the clip, which would allow the user to choose their next piece of content.

But we also had “any response” interactions that allowed the user to speak freely, and be taken to the next clip available. This also simplified some of our location flows, making the experience easier to implement.



Hidden Cities UX Design

Real Voices

We hired Caroline, a Berliner and local radio presenter to be the Action's instructional guide.

During user testing we found that a real, human voice was favoured, as it gave the experience personality and humour. Other types of voices took the user out of the immersive experience and made it feel more like a functional Action.



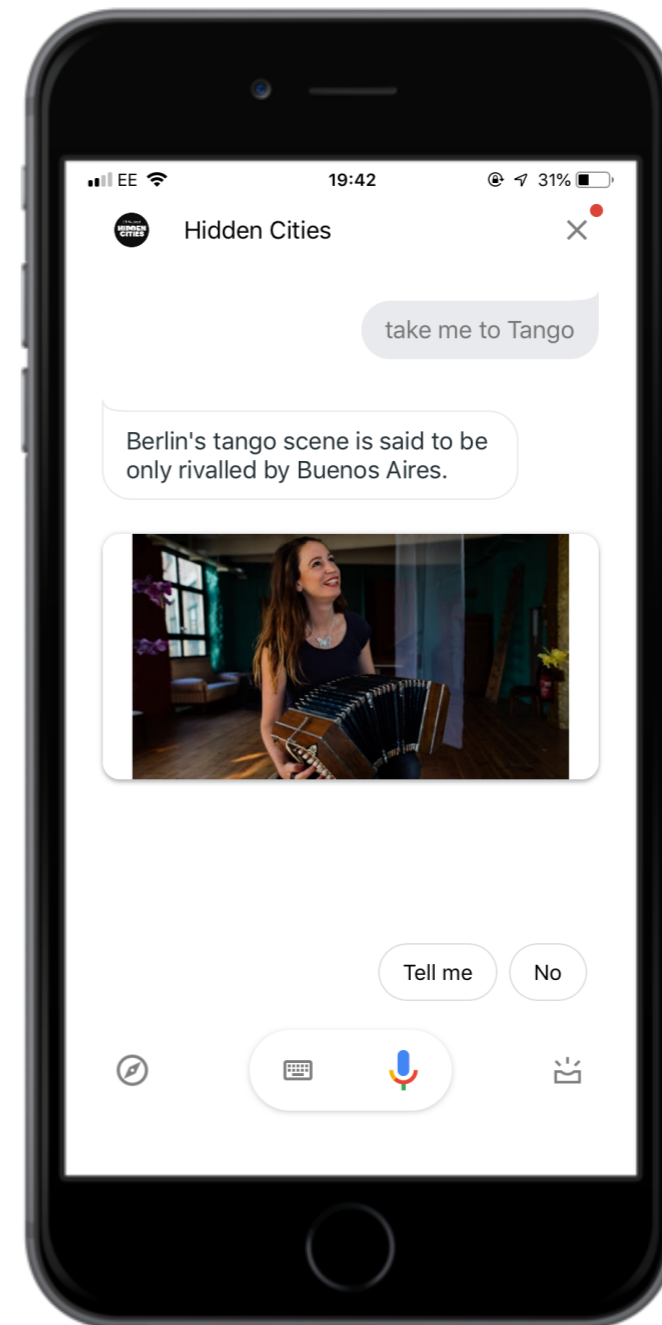
Hidden Cities UX Design

How to Help

Simple error handling and help menu

We used best practice where the Action gives the user two attempts, with more direct prompts at each error, and then gracefully removes them from the experience.

The help menu could be accessed at any point, and had its own flow but also only offered three options at any time.



Hidden Cities UX Design Onboarding

Getting into Hidden Cities Berlin was possible in two ways.

The user could say **“Hey Google, take me to Hidden Cities Berlin”**. This would start the Action from the first location.

The user could also say **“Hey Google, talk to hidden cities, the lakes”** (or any one of the nine locations). This would drop them into the experience somewhere along the circular flow, which would then move them through the experience clockwise.



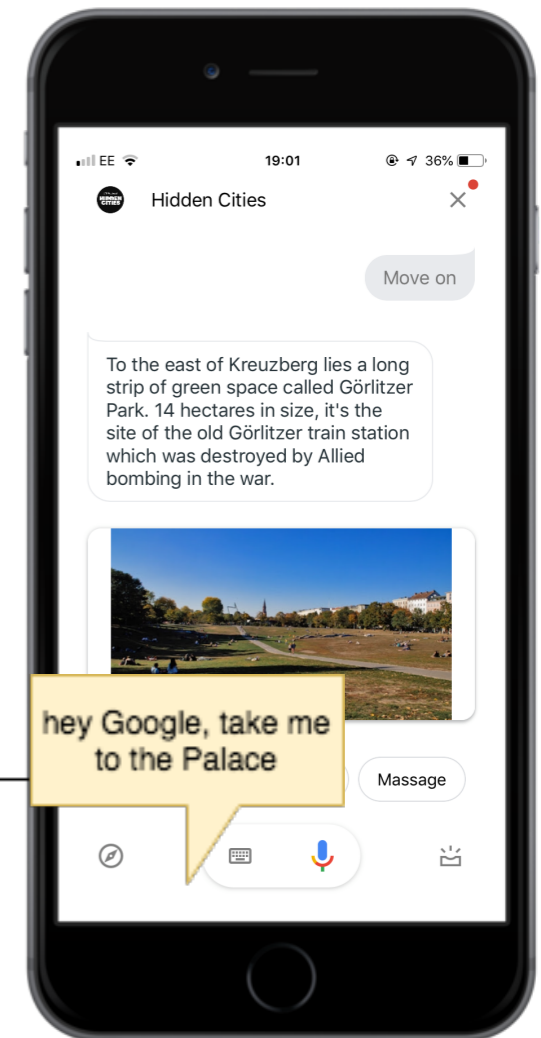
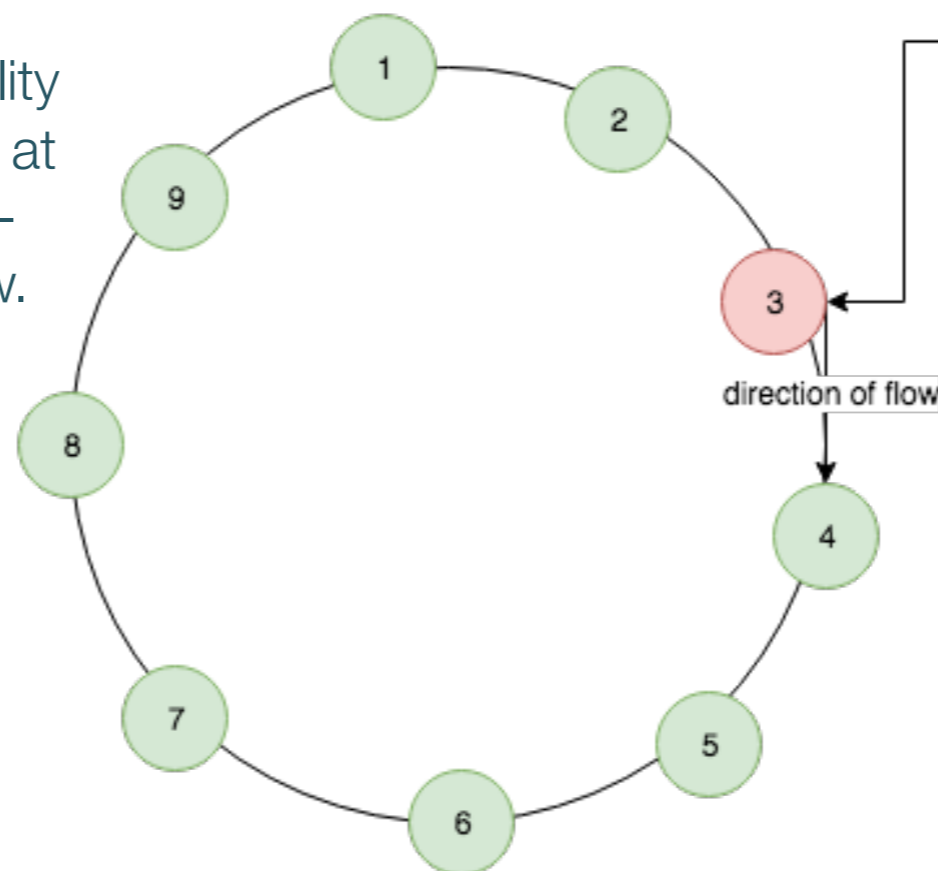
Hidden Cities UX Design

Moving Through

Once in the Action it was important to allow the user to move around easily, but without too much instruction.

The user could, if they knew the locations, instruct the Action to **“Take me to Tango”**. However, it was important to design for those users without the physical map and those who did not recall all the locations available.

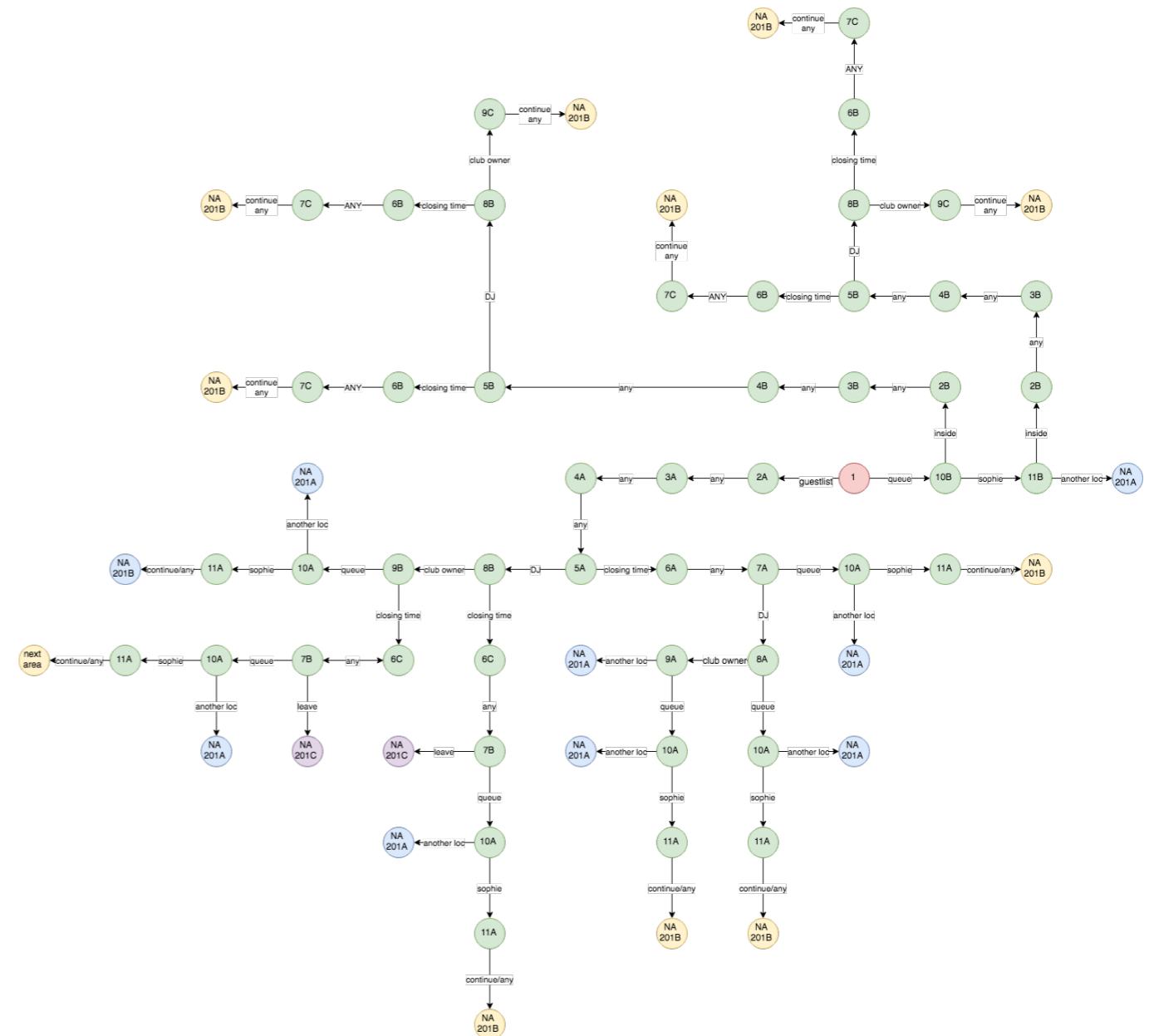
This was solved by creating functionality where the user could say **“move on”** at any time and be taken to the next, un-listened to location on the circular flow.



Hidden Cities UX Design Flows

Each of the nine locations had their own flow. To create these we:

- **Developed story outlines**
- **Ran UX sessions**
- **Scripted the entire experience**
- **User tested the location**
- **Updated the scripts and flows**



Hidden Cities UX Design Editorial Process

Created a master list of ideas working collaboratively with the FT and Berlin producers

Located the contributors in each location who could tell the stories

Created a sample flow for each location setting the structure of the UX

Wrote a full draft script prior to recording with full sign off from the FT

Created a content complete beta version with some temporary audio for the interaction questions

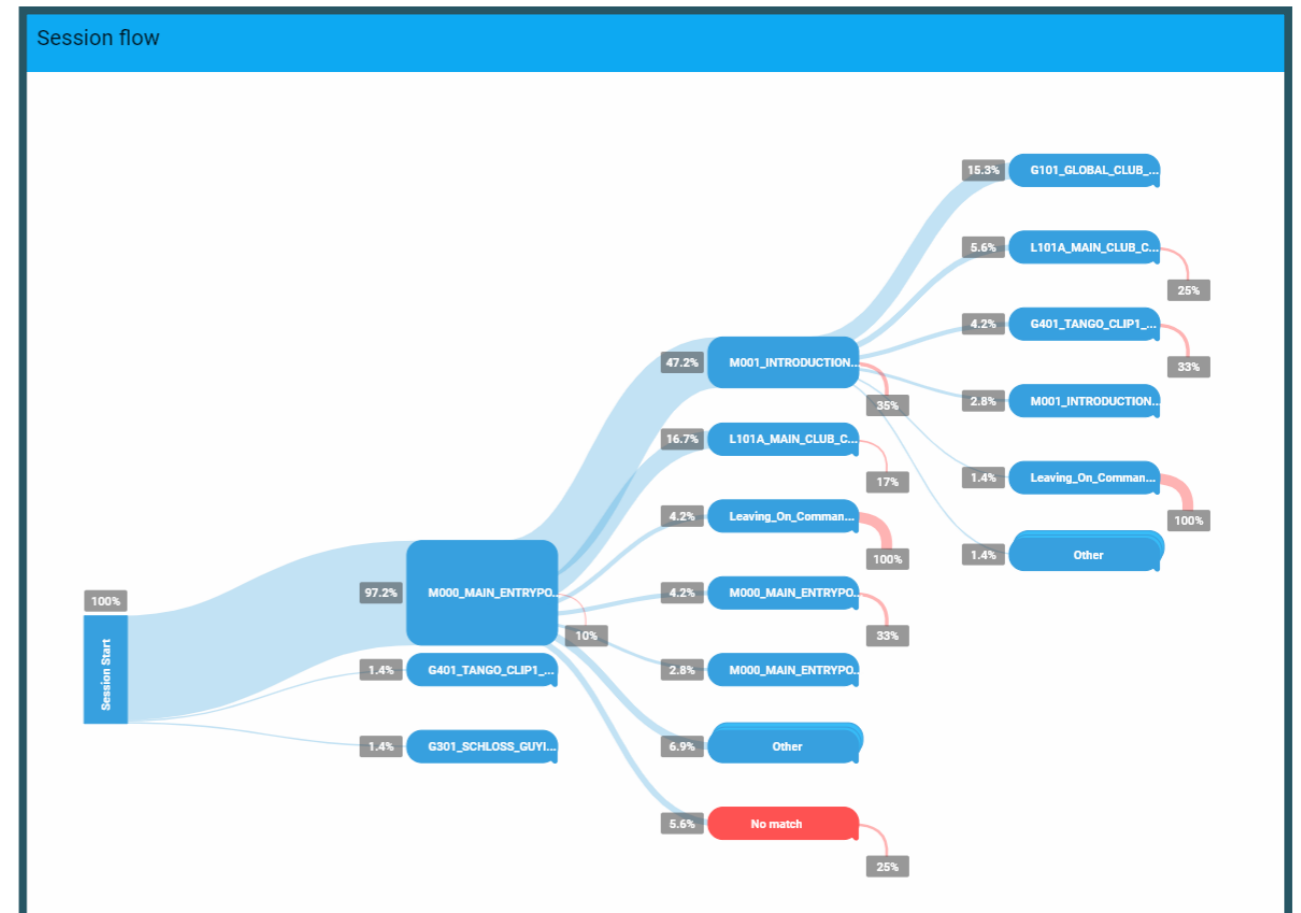
User tested the beta versions and received sign off before doing a final record with Caroline in Berlin



Hidden Cities Technical Production Beta

For Beta we built:

- A simple CMS where all of the content could be managed by a producer
- DialogFlow files generated from CMS database
- DialogFlow files packaged and uploaded automatically



Hidden Cities Technical Production CMS

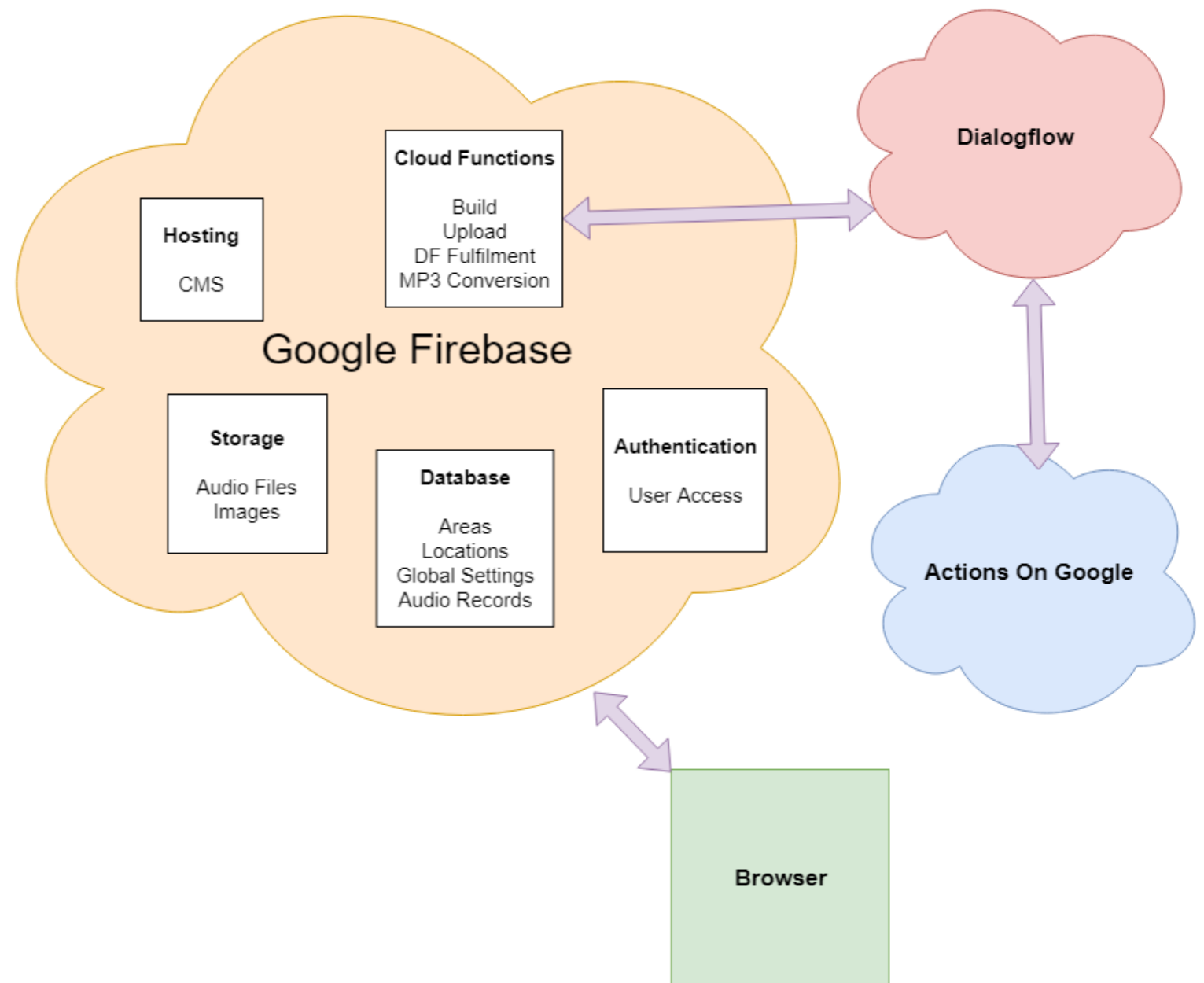
Stayed within the Google Ecosystem by using Firebase services for...

- Hosting
- Cloud Functions
- Cloud Storage
- Realtime Database
- Authentication

Language: Javascript

Cloud Functions

- WAV to MP3 Conversion
- Build Process
- Upload to Dialogflow
- Dialogflow Fulfilment



Hidden Cities Technical Production CMS

Simple data entry system

- Create areas
- Create locations within areas
- Join locations together
- Enter script copy
- Upload audio
- Build and upload to Dialogflow
- Test instantly

No user interaction with Dialogflow UI

Developed as a flexible system for future content

The screenshot shows the 'Area Admin' section of the Impromptu Story Assistant. It features a table with columns for Actions, Area Name, Start Location, and ID. The table lists nine areas, each with a 'Delete' and 'Edit' button. The 'Start Location' column contains dropdown menus with various location names. The 'ID' column contains long alphanumeric strings.

Actions	Area Name	Start Location	ID
Delete Edit	A001_CLUBS	L101A_MAIN_CLUB_CLIP1_GUYINTRO_V1	a4428459-5b3c-0121-1939-213f9a698eb2
Delete Edit	A002_FREESPACE	L201A_ANOTHERLOC_FREESPACE_CLIP1_GUYINTRO_V1	7fe88958-5c88-2cca-8afc-9925c4f3f897
Delete Edit	A003_SCHLOSS	L301A_ANY_SCHLOSS_GUYINTRO_V1	fde1134d-7cc2-cb6e-fc9b-4f0979d665ff
Delete Edit	A004_TANGO	L401A_ANY_TANGO_CLIP1_GUYINTRO_V1	b03cf451-b380-509a-7d17-8efa7eb9b296
Delete Edit	A005_ART	L501_ART_CLIP1_GUYINTRO_V1	caeab35f-5e04-f225-93c8-e1fccff0c4bc
Delete Edit	A006_PARK	L601A_ANY_PARK_CLIP1_GUYINTRO	7e2dff0b-a182-e6b8-4144-fbc8315a8f36
Delete Edit	A007_REFUGEES	L701A_CONF_REFUGEES_CLIP1_GUYINTRO_V1	f3383fd6-c9d7-57d3-1c5d-768beff8733f
Delete Edit	A008_LAKES	L801A_ANY_LAKES_CLIP1_GUYINTRO_V1	d205948f-1130-cad8-e64e-7ebd3cec0095
Delete Edit	A009_STARTUPS	L901A_ANY_STARTUPS_CLIP1_GUYINTRO_V1	7e0833b4-5d24-1bce-b931-05c2d5df7904

The screenshot shows the 'Location Admin' section of the Impromptu Story Assistant. It features a table with columns for Actions, Location Name, Area, and ID. The table lists various locations, each with a 'Delete' and 'Edit' button. The 'Area' column contains dropdown menus with area names. The 'ID' column contains long alphanumeric strings.

Actions	Location Name	Area	ID
Delete Edit	DEBUG_CLEAR	-----	cae9c2c3-b218-6d2d-6e57-a88ca030462a
Delete Edit	G101_GLOBAL_CLUB_CLIP1_GUYINTRO_V1	A001_CLUBS	a1d394f1-5edd-fc48-6573-502ea2f5be32
Delete Edit	G201_GLOBAL_FREESPACE_CLIP1_GUYINTRO_V1	A002_FREESPACE	7de53f24-c79c-68a1-0e80-3975d1c374eb
Delete Edit	G301_SCHLOSS_GUYINTRO_V1	A003_SCHLOSS	87b1d19a-bb9f-fbe2-2557-5223b4a6bc9f
Delete Edit	G401_TANGO_CLIP1_GUYINTRO_V1	A004_TANGO	a4146f03-129c-b106-69c3-de1bb7ad29be
Delete Edit	G501_ART_CLIP1_GUYINTRO_V1	A005_ART	954fa8c2-0572-71c1-3ec7-2a5695b99a39
Delete Edit	G601_PARK_CLIP1_GUYINTRO_V1	A006_PARK	ecdf5c17-0315-01fa-f5ae-b84250948d3b
Delete Edit	G701_REFUGEES_CLIP1_GUYINTRO_V1	A007_REFUGEES	d57f0de8-a60f-9340-1d70-7690bb8148ee
Delete Edit	G801_LAKES_CLIP1_GUYINTRO_V1	A008_LAKES	cb118fe4-ec4d-5996-4965-fd4b4e8907e0
Delete Edit	G901_TECHSCENE_CLIP1_GUYINTRO	A009_STARTUPS	98183e34-bb45-1ff6-ff33-063b9c5f694a
Delete Edit	H001_HELP_FIRST_THREE_CHOICES	-----	c730f7a9-faef-51e3-a31c-455431bcccdd
Delete Edit	H002_HELP_NEXT_THREE_CHOICES	-----	bc4c09c9-c2e9-171d-b0ed-7903faf30a12
Delete Edit	H003_HELP_LAST_THREE_CHOICES	-----	b26687de-c009-486e-e436-8d628b074db2
Delete Edit	H004_HELP_FINISH	-----	e59f7c20-f6b0-1002-f20c-b5b9b88cc803

Hidden Cities Technical Production CMS

Training Phrases

Issues with synonyms

Main Speech

Documentary speech

Prompt (Caroline)

Error Handling

2 strikes and you're out

Destination Locations

Training phrase matching

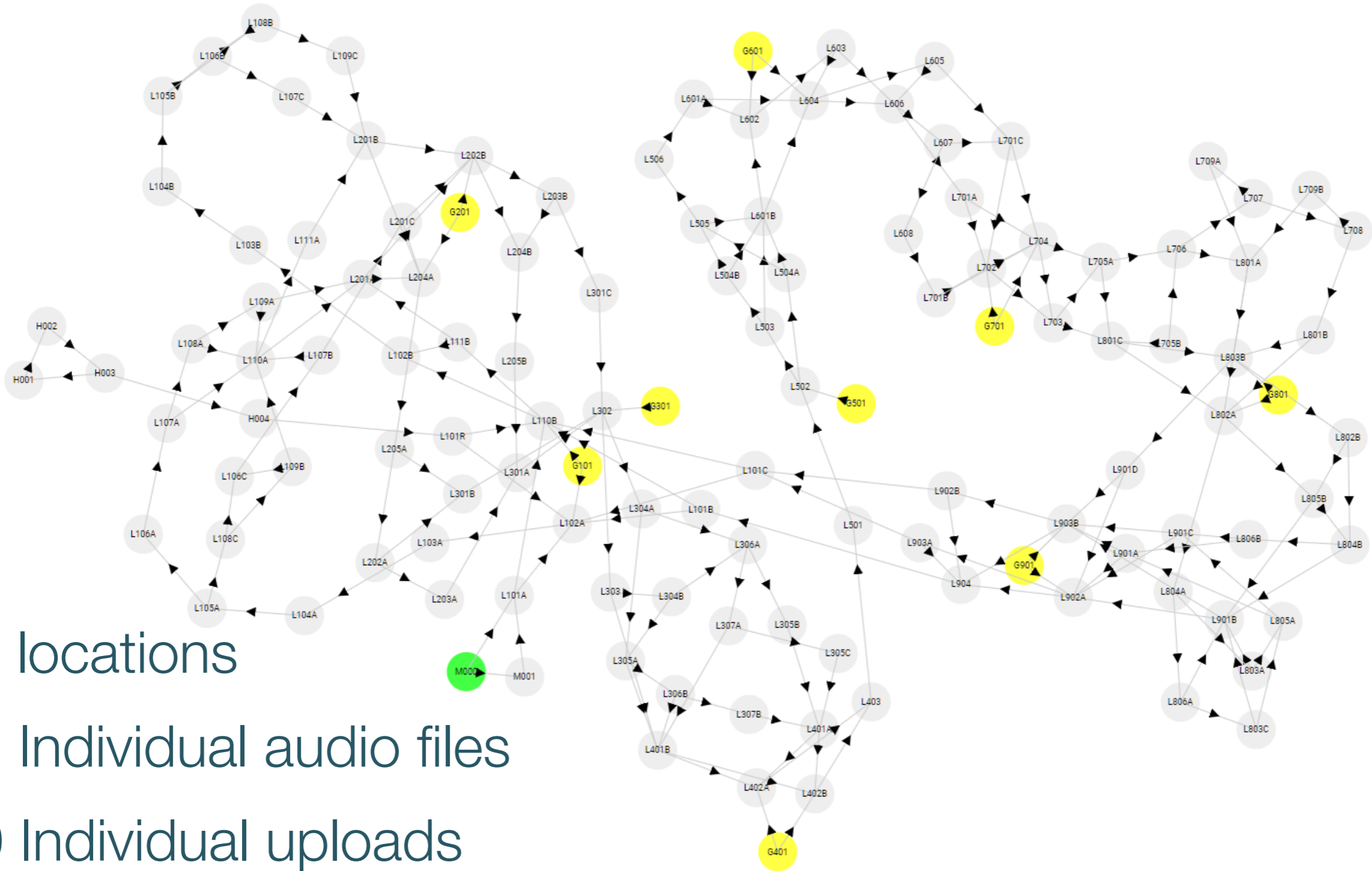
Card Slot for images and text on visual devices

The screenshot displays the 'Impromptu Story Assistant' web application. The top navigation bar includes the logo, the title 'Impromptu Story Assistant', and a user profile for 'Nigel Brown' with a 'SIGN-OUT' link. Below the navigation bar, a series of tabs are visible: 'Overview', 'Global', 'Location Admin', 'Locations', 'Location Map', 'Area Admin', 'Audio Assets', and 'Build'. The 'Locations' tab is currently selected.

The main content area is divided into two sections. The left section is for configuring a training phrase. It features a dropdown menu with 'L205A_FREESPACE_CLIP5_HASSELHOFF_V1' selected, a 'Save' button, and a 'Start Location' checkbox. Below this, there are checkboxes for 'Global Location', 'Help Location', and 'Clear User Data On Entry'. A 'Card Slot' section includes a 'Save Card Slot' button, a 'Card Title' input field, and a 'Card SubTitle' input field. At the bottom of this section is a thumbnail image of a tunnel entrance with the number '34' visible.

The right section displays a flowchart. It starts with a node 'L204A' at the top, which connects to 'L205A' via a red arrow labeled 'ANY RESPONSE'. From 'L205A', two arrows branch out: a red arrow labeled 'Property developer' pointing to 'L202A', and a grey arrow labeled 'Continue on' pointing to 'L301B'.

Hidden Cities Technical Production CMS



125 locations

331 Individual audio files

650 Individual uploads

Contact: nicky@rosina.io

Design and build by

RosinaSound